

Polar Bear
Provincial Park

Pam: 712.23: (*425) PBPP

POLAR
PAM
5373

POLARPAM

POLAR BEAR PROVINCIAL PARK

Since 1970, Ontario has had a huge wilderness provincial park beside the shores of James and Hudson bays. The park's name, Polar Bear, suggests that it is a unique addition to the Ontario Provincial Park System. It is, indeed, for the "Great White Bears of the North", roaming wild and free, are only one of the outstanding features that make this park different from any other you have ever seen.

Polar Bear has almost 300 miles (483 km) of salt-water shoreline on the two bays, and covers more than 9,300 square miles (14,973 km²), making it one of the largest parklands anywhere.

WILDERNESS PARK

This remote area was established as a provincial park because it excellently represents subarctic and arctic landscapes in one of the least altered tracts of land remaining in Ontario. The park includes a large area of one of the most southerly extensions of arctic tundra in the world. This tundra, or treeless area, supports many species of plants and animals that occur nowhere else in Ontario. By including it in the Ontario Provincial Park System, the preservation of this wilderness area for present and future generations is assured.

In the best interest of all the people, and of this primitive area, much on-the-ground study and careful, detailed planning has been done. This planning will be reconsidered critically, and expanded before any development is undertaken within the park.

THE SHAPE OF THE LAND

To get an impression of Polar Bear Park, visualize it as a vast lake and pond-dotted plain that slopes gently into the waters of Hudson and James bays. Much of the land has a covering of colourful peat (sphagnum) moss resulting from poor drainage and the cold, wet climate.

Through eons of time, this remote and lonely land has undergone many spectacular changes that have made it what it is today. For instance, about 400 million years ago, during the Palaeozoic era, it was covered by salt water that teemed with sea creatures such as corals, molluscs and other shell creatures. As the thousands of years rolled by, shells of these dead animals built up limey deposits on the sea bottom, giving Ontario some new rocks — the fossil-bearing limestones that now underlie most of Polar Bear Park.

Rec'd: Aug 7/80

Order No.:

Price: Gift

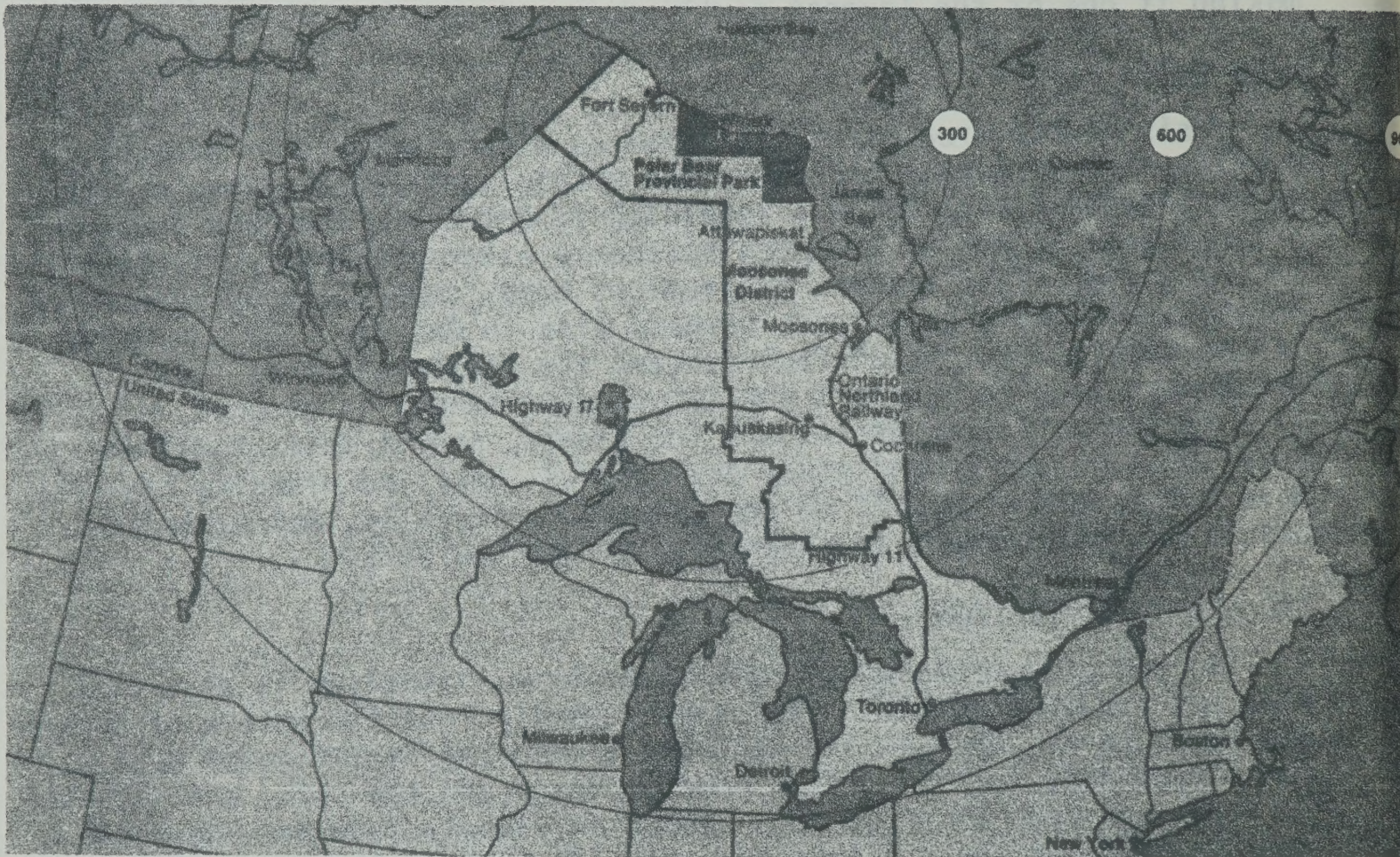
Acc. No.: Lou Zivot

40574

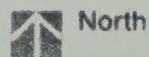
Regional Context

- 300 300 miles (482.8 km)
from Winisk
- 600 600 miles (965.6 km)
from Winisk
- 900 900 miles (1448.4 km)
from Winisk

- Ministry of Natural Resources
Northern Region Boundary
- Polar Bear
Provincial Park



1 inch equals 300 miles
1 centimetre equals 193 kilometres



GLACIERS

Then came the ice ages, when life in the north was frozen and stilled for over a million years, buried under a succession of glaciers that literally depressed the parkland with their massive weight. As the glaciers bulldozed their way southward across the land, they carried away some of the limestone, but dumped in exchange, a layer of boulders, gravel and sand, scrapings from the land farther north.

SHALLOW SEA

When the last of the glaciers melted about 7,000 years ago, a shallow sea again covered the land, and over the long, long years a layer of marine clay built up on the sea bottom. This is the gooey stuff that grabs the traveller's feet along the rivers and tidal coast of Polar Bear.

Freed from the crushing weight of glacial ice, the park began to rise towards its former level much as a crumpled sheet of paper expands. It continues to rise today at the astounding rate of almost 4 feet (1.2 m) a century. As the rising land pushes the sea back north, Polar Bear grows nearly 3 square miles (7.8 km²) a year. This is an area larger than most Ontario provincial parks.

BEACH RIDGES

Temporary pauses in the uplift of the land or occasional severe storms, have caused slightly elevated beach ridges of sand and gravel to be deposited parallel to the coast. These are the most striking landforms in the park and rows of them extend miles inland from the present seashore. Ridge concentrations are particularly extensive between the Winisk River and the western boundary of the park and also south of Cape Henrietta Maria.

THE COAST

We are accustomed to thinking of a coast as a definite narrow shoreline, but to the inhabitants of the Hudson and James bays region the word conveys a very different meaning. There, the coast is a broad mud and boulder flat, several miles in width, always wet, and, twice-daily, flooded by the tide. Above the tidemark, the shore is semi-dry for 2 or 3 miles (3.2 or 4.8 km). This is a muddy belt of sedge, grass and rush, dotted with brackish ponds, and interspersed with innumerable tidal creeks. An exceptionally high tide can cover all of this foreshore, and at low water the sea practically disappears below the horizon. The intervening miles of tidemark consist of mud, strewn with

large boulders and jagged blocks of limestone.

TUNDRA

The gradual uplift of the land since the close of the last great ice age has been relentlessly pushing Hudson Bay back north. Forest in these latitudes usually follows closely the retreat of the sea, but it never quite overtakes the bay. Always separating them is a narrow strip of tundra, a lonely but far from barren land that has been above the sea for only about 1,000 years. The surface of this almost treeless region is underlain, in many places, by permanently frozen ground, or permafrost. In the park, the distance of the tree line from the coast varies from about 20 miles (32.2 km) southwest of the cold spot where Hudson and James bays meet at Cape Henrietta Maria, to 2 or 3 miles (3.2 km or 4.8 km) near the mouth of the Sutton River.

Looking over the tundra from the slight elevation of a raised beach, it is not difficult to visualize sea water covering the flats as it did 1,000 years ago. Today, instead of water, the land between the ridges is covered by a layer of wet mosses, sedges, and grasses interspersed with peat mounds heaved by frost action. Shallow ponds dot the flat landscape which seems to stretch endlessly into the distance.

INLAND FROM THE TUNDRA

Separating the treeless tundra from the northern edge of the boreal forest is a poorly defined mosaic of forest and tundra, termed "forest barrens" or "forest tundra". This transition area or ecotone is almost nonexistent near the west bank of the Sutton River, while northwest of Lake River it is close to 15 miles (24.1 km) wide. Its main forest components are white spruce, tamarack and willow. Reindeer lichens grow profusely throughout the drier, more open, forested sections.

Moving further inland from the tundra belt, clumps of tamarack and spruce begin to appear on the ancient beach ridges and along the better-drained riverbank sites. Gradually the riverbank forest becomes more luxuriant.

Away from the river drainage, the forest rapidly thins out to open bog with hummocks of stunted spruce and tamarack. Peat moss carpets the ground and pools are everywhere. Cross-country travel over this "Great Muskeg" ranges from very tiresome to impossible, and it is beset with hordes of mosquitoes and blackflies.

THE RIVERS

The rivers of Polar Bear Park have many interesting features. Shallow and fast-flowing, they have cut canal-like trenches into the layers of peat, marine clays and glacial drift that cover the land. They erode all these layers with great force during the spring runoff. Ice pans, pushed over the banks on the flood, raft boulders and rocks high onto the banks and bulldoze vegetation and soil from the tundra and pile it up in heaps.

Characteristic of rivers in flat country, those of Polar Bear tend to meander. On the outside of each curve, the rivers cut into and erode their banks, producing steep banks with little or no beaches. On the inside of each curve, especially at the upper end, the water is moving more slowly and deposits some of its load to produce a gravel bar. The gravel bars are interesting to explore as they are often littered with chunks of fossil-bearing limestones.

CLIMATE

Polar Bear's climate is typified by long cold winters and short summers with a growing season of less than 3 months. However, the short growing season is compensated by long hours of daylight at this latitude.

Breakup of the sea ice on Hudson Bay comes late, and pack ice may drift about offshore often well into August. Cold sea fogs and winds off the ice floes are common, and effectively lower summer temperatures. Summer days vary from agreeably warm to disagreeably cold. On warm days the blackflies and mosquitoes are extremely thick, while on cold days winter underwear and a parka are needed.

ANIMAL LIFE

BIRDS

Besides the annoying (to humans) airborne creatures, such as blackflies and mosquitoes, the park is home, at certain seasons, for a large variety of interesting winged animal life. Waterfowl are very abundant in this pond-dotted land. Each spring, thousands of snow geese unwaveringly wing their way north from their Gulf of Mexico wintering grounds to raise their young in the park. Canada geese and many species of duck, including old squaw and king eider, consider Polar Bear Park their summer home. The attractive arctic loon, another bird associated with water, nests on shallow tundra lakes. Some of the many species of land birds favouring dry tundra sites of the park include: white-crowned and tree sparrows, redpolls, rough legged hawks,

willow ptarmigans, horned larks and lapland longspurs. Fish-hunting ospreys build their massive tree nests in the forested inland lake country.

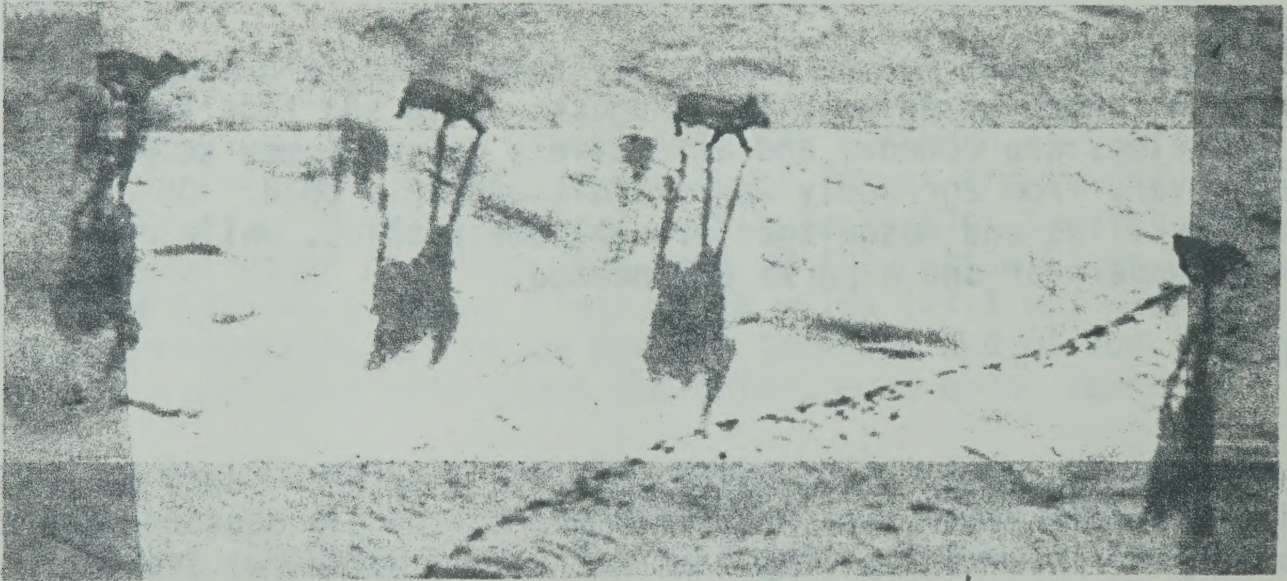
The coastal regions of the park abound with many varieties of shorebirds such as sandpipers, yellowlegs, plover (including the golden and semipalmated) during the brief summer. For the observer, their flitting, intermingled numbers can be both a delight and a frustrating exercise in identification.

MAMMALS

While most species of Polar Bear's birds are migratory, the land mammals are year-round residents in the north.

Polar bears, that have spent the winter stalking seals on the pack ice of the bays, come ashore when the ice melts. Then, these massive beasts rest and forage along the coasts for such foods as grasses, lichens, and washed up dead seals and whales. A few pregnant females wander inland during the summer en route to winter denning areas.

In spring, herds of woodland caribou, that have wintered among the protection of trees, move out onto the wind-swept tundra, where some relief from large biting flies is assured.



After spring breakup, white whales enter the estuaries of the larger rivers in search of fish. Pods of many dozens of these graceful animals, seen from the air, can be a memorable sight.

Some of the other mammals occurring in Polar Bear Park are seals, silver (phase) and arctic fox, timber wolf, otter and beaver.

FISH

The game fish which occur in park lakes and streams are brook trout (in many of the streams, especially along the Hudson Bay coast); northern pike, which is found in some of the larger rivers and lakes; and the walleye, or yellow pickerel, which occurs at least in the Winisk River drainage system of the park. Whitefish are also well distributed within the park and in its estuarial regions.

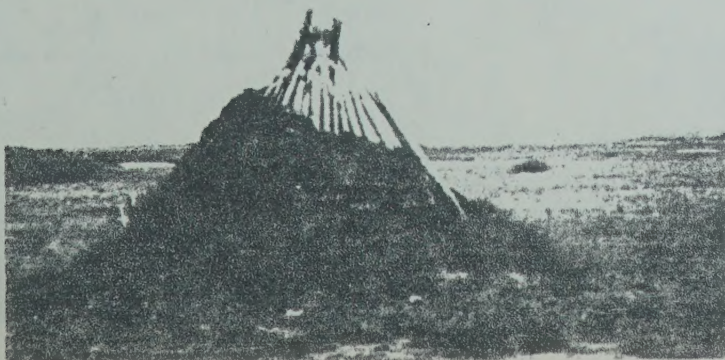
PLANT LIFE

For a short time each summer, the beach ridges of Polar Bear Park are ablaze with colour, transformed to incredibly gay "gardens" by the blooms of dry tundra plants, such as the showy, creamy-coloured mountain avens. The avens, like many plants that grow on wind-swept ridges, tend to develop flat dense cushions, the shape of which provides protection against evaporation and damage by wind and drifting sand and snow.

Plants of the tundra do not grow haphazardly amongst one another. Those having similar soil requirements as to moisture and wind or snow protection generally grow together in more or less well-defined communities. With the mountain avens may grow bluebells, white chickweeds, purple-flowered rhododendron, or *Hedysarum Mackenzii*, whose showy purple flowers are scented like sweet clover.

Cladonia lichens, the so-called reindeer mosses — and a preferred food of caribou, beautify the ridges with their charming patterns and various shades of browns, greens and grays. They grow so luxuriantly that dwarf shrubs such as willow, bearberry and crowberry tend to become submerged in the lichen mat. Although luxuriant, lichens are the plants of Polar Bear Park most vulnerable to human impact. When dry, their brittle stems are pulverized by the foot of the traveller. When wet, they are torn from the tundra in great chunks as they are walked on.

HUMAN HISTORY



Archaeological evidence reveals that Cree Indians, ancestors of those presently living in the Hudson and James bays country, had been living in Polar Bear Park many centuries before the white man arrived.

Probably the first Europeans

Aircraft Access

Access Zones

Aircraft Access

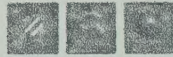
- 1
- 2
- 3
- 4

Brant River

Shagamu River

Site 415

Sutton River



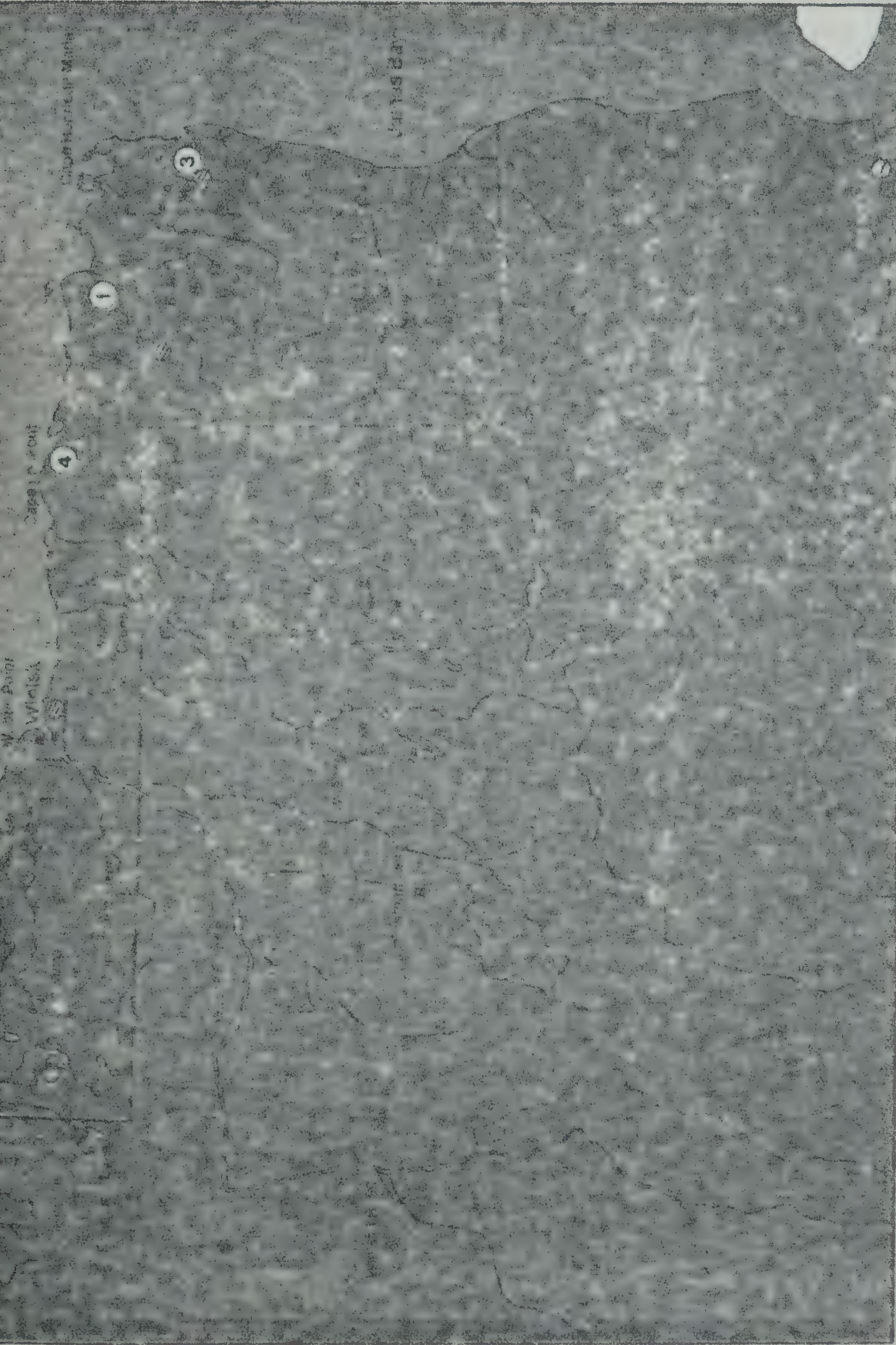
Airstrip

Seaplane landing

Possible seaplane landing

Hudson Bay

2



1 inch equals 32 miles

1 centimetre equals 20.3 kilometres



to set foot in the park were some of the crew of Captain James, an English explorer, who sailed along the Hudson Bay coast almost 350 years ago and named Cape Henrietta Maria in honour of his Queen. About 40 years later in 1668, the Company of Adventurers Trading into Hudson's Bay, now known as the Hudson's Bay Company, sent men to the northern seas to glean wealth from furs in the New World. A considerable amount of the early exploration of the Polar Bear Park area was done by the Company's personnel.

The last trading post in Polar Bear, the Hudson's Bay's winter store at Lake River, closed in 1967.

During the late 1950s and early 1960s, a number of Mid-Canada Line radar bases were in operation across the park. The most important of these was Site 415, south of Cape Henrietta Maria. The last of the sites ceased operation in the mid 1960s.

RECREATION OPPORTUNITIES

SPORT FISHING



Sport fishing in Polar Bear is governed by the Ontario Fishery Regulations and no special regulations, seasons or licences are in effect at present (1977). Survey work to determine the fishing potential of some park lakes and rivers has been done by Ministry personnel.

HUNTING

Hunting in Polar Bear Park by other than native people is permitted only at two Cree-operated goose camps near the mouths of the Sutton River and Shagamu River. The Sutton River camp was in operation before the park was created. Geese, ducks, ptarmigan, sharp-tailed and spruce grouse, and snipe only may be shot at these camps in accordance with Ontario and federal regulations.

CANOE TRIPPING

Canoe tripping in the wild, natural setting of Polar Bear Park can be a rewarding experience. Some of the better canoeing possibilities are the Brant, Kinusheo, Lakitusaki, Mishamattawa, Opinnagau, Shagamu and Winisk rivers.

BACKPACKING

The old 18 mile (29.0 km) road from Site 415, across beach ridges and sedge meadows, to sand dunes at the coast of James Bay is presently (1977) the only definite hiking route in Polar Bear. However, series of interconnecting beach ridges near the Hudson Bay coast and the James Bay coast possibly will be suitable areas for future hiking trails.

WILDERNESS "EXPERIENCE"

Visitors en route to park access zones will be able to view the remarkable patterns and colours of Polar Bear's landscape from the air, and thrill to its wild and lonely beauty.

While enjoying a wilderness "experience" in Polar Bear, visitors will have the opportunity to study, photograph and otherwise enjoy the natural and human history of the park. The subject matter is of considerable interest, particularly the mixture of arctic and subarctic plants and animals.

While the visitor is sure to become acquainted with many different kinds of northern plants and birds, it should be pointed out that it is possible to visit Polar Bear Park many times and never see a polar bear or a caribou. Although a few polar bears wander inland during the summer, nearly all are out on the coastal flats and cool headlands, places which are very difficult to reach. This is probably good, as polar bears are unpredictable in their behaviour towards humans, and they can be dangerous. The caribou, on the other hand, are wanderers, and their appearance at any particular place is highly unpredictable. A person may stay in the park an entire summer and never see a single caribou.

ACCESS TO THE PARK

At present, the most practical method of reaching Polar Bear Park is by aircraft. Recreation aircraft are permitted to land only at certain locations within access zones. Details are available in the two park publications mentioned on the last page of this brochure and/or from the district manager in Moosonee. The landing areas are located at or near the Brant, Sutton and Shagamu rivers and at Site 415. Low water conditions during late July and August and occasionally September can create aircraft access problems at the Brant and Sutton River landing sites. Aircraft landing outside the park is possible at Attawapiskat, Hawley Lake, Fort Severn, Shagamu Lake, Winisk and other locations. In addition to floatplane landings at all these places, there are airstrips at Attawapiskat, Site 415, Winisk and Severn. (The

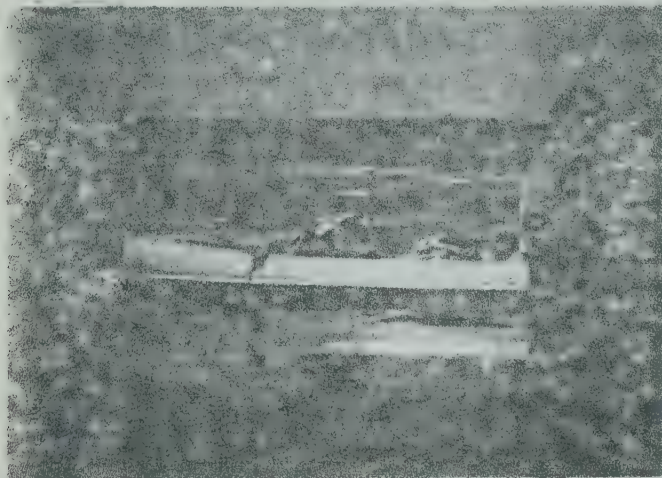
airstrip at Site 415 is not maintained at present, therefore pilots using it do so at their own risk.)

The weather of the coastal and interior areas of Polar Bear presents a problem for aircraft travel, as fog is frequent and unpredictable.

Lakes and rivers of the park are characteristically shallow and rock-strewn, and places suitable for float landings are scarce.

Scheduled flights from Moosonee to Winisk are operated by a commercial airline which has regular weekly return trips. The October, 1977 return fare was \$240.00. It is important to check timetables well in advance of proposed trips as rates and times are subject to change. Although outside the park, the airstrip and Cree goose camp complex at Winisk serves as an important access area. There are also scheduled flights between Moosonee and Attawapiskat.

Charter service from Moosonee, Cochrane and other northern places is provided by commercial flying companies. Typical October, 1977 per-mile charter rates were: by DC-3, \$2.40; by De havilland Otter, \$1.85; by De havilland Beaver, \$1.25. Parties are charged mileage for the return of the aircraft to its base.



Water travel by freight canoes to the park along the James Bay coast from Moosonee, Fort Albany or Attawapiskat is possible but should not be attempted without the services of a competent guide because of the shallow water, the rocks, the tides, unpredictable weather, and a poorly defined and inhospitable shoreline.

Freight canoe travel along the Hudson Bay coast from Fort Severn, Winisk, the Shagamu and Sutton rivers is also possible with the services of a competent guide.

PREPARING FOR A TRIP TO POLAR BEAR

As Polar Bear is a wilderness park, far removed from human settlement, anyone visiting this remote region should prepare for the trip with more than usual care. The success of the trip will depend, to a large extent, upon the thoroughness of advance planning and the realization that visitors to the park must be completely self-reliant.

In addition to the standard items carried on wilderness trips, the following gear is essential.

1. A winter-weight sleeping bag.
2. Warm clothing including long underwear, parka, mitts and rain and windproof outer garments. Hip-waders are important for coastal travel.
3. A light, waterproof and condensation-proof tent that can be well guyed (because of wind problems in the coastal and tundra areas), strong poles and tent stakes (especially for use above the tree line where these are simply not available) and a fly sheet. The tent should have strong, fine-meshed insect netting, heavy duty zippers and a storm door. It should be a bright colour (blaze orange and yellow are best) which is easily visible from the air or the ground at a distance.
4. A reliable stove for cooking and heating and an ample supply of fuel sufficient to provide warmth during possible cold, rainy days. It is important to calculate fuel requirements carefully and then add a generous extra supply in case of a week's delay in pickup. Under no circumstances, stint on fuel.
5. An ample supply of insect repellants and pyrethrin type insect coils.
6. An extra supply of food for at least a week because of the high odds of being "weathered in", missing aircraft pickups, etcetera. Freshly processed freeze-dried provisions are recommended as weight is often a critical factor.
7. A well-stocked first aid kit. (The nearest doctor is in Moosonee.)

A WORD ABOUT PARK RULES

There is only one basic rule in Ontario's provincial park system: have respect and consideration for your fellow visitors and the park environment. There is a Provincial Parks Act as well as other legislation in which the laws that apply in provincial parks are set out. These are available in the park office and you are invited to examine them. If you keep the basic rule in mind, though, you will probably never need to concern yourself with the fine points of the law. However, some specific points to remember, in addition to those already mentioned throughout the brochure, are summarized in the following sections.

Although no special regulations have yet been enacted regarding the use of Polar Bear Park, the following rules are likely to be

incorporated into the Regulations Under the Ontario Provincial Parks Act in the future. In the meantime, visitors are expected to observe these.

Except during emergencies, aircraft landings may be made only at access zones as specified on page 11 and 12. Aircraft owners must supply their own fuel. They should also carry emergency equipment as prescribed in The Air Regulations and Aeronautics Act (No. 216) and The Air Navigation Orders (Series II, No. 10 and Series V, No. 12).

Equipment including tents and canoes, may not be left unattended in the park for more than a few days by any individual or group except at access zones.

Caution must always be exercised with fire.

Garbage and refuse must be brought out of the park.

Waterfowl, ptarmigan and snipe hunting are permitted for non-natives only at the Shagamu River and Sutton River Cree-operated goose camps in accordance with The Ontario Game and Fish Act and The Migratory Bird Convention Act.

Firearms are allowed only at the Shagamu River and Sutton River access zones for use by clients of the Cree-operated goose camps.

Activities involving mechanized vehicles are not permitted except in the case of motor canoes used by native guides at the Sutton River and Winisk River access zones, and aircraft landings at the four access points.

No pets are allowed in the park.

In addition to the foregoing recommendations, the following excerpt from the Regulations Under the Provincial Parks Act applies to Polar Bear Park. No person shall, (a) remove or damage any plant; (b) remove or damage any table, bench, seat, fireplace, monument, relic, artifact, marker or sign; (c) deface, damage, or remove any bridge, building, structure, natural object, rock, cemetery, mausoleum, grave, human remains on any property of the Crown.

FEES

At present no fee is charged to visit Polar Bear Provincial Park. Reservations are not required at present although visitors are encouraged to leave their names, their proposed route through the park, and their estimated time of return at either the district office in Moosonee or the park office at Winisk.

MAPS

Maps covering the park and James and Hudson bays may be obtained from:

Map Office
Ministry of Natural Resources
Whitney Block
Queen's Park
Toronto, Ontario
M7A 1T3

District Manager
Ministry of Natural Resources
Box 190
Moosonee, Ontario
POL 1Y0

Map Distribution Office
Surveys and Mapping Branch
Department of Energy, Mines and Resources
Ottawa, Ontario

FOR FURTHER INFORMATION CONTACT:

The District Manager
Ministry of Natural Resources
Box 190
Moosonee, Ontario
POL 1Y0

or

The Division of Parks
Ministry of Natural Resources
Whitney Block
Queen's Park
Toronto, Ontario
M7A 1T3

[illegible]

BOREAL INSTITUTE FOR NORTHERN STUDIES, LIBRARY
THE UNIVERSITY OF ALBERTA
EDMONTON, ALBERTA T6G 2E9
CANADA



ONTARIO PROVINCIAL PARKS

This park is administered by the Recreation Division of the Ontario Ministry of Natural Resources. The division's job is to plan, maintain, and protect thousands of square miles of land from Hudson's Bay to Lake Erie, from Manitoba to Quebec. Provincial parks vary considerably in size and use. Each of them is classified as a recreational, natural environment, wild river, primitive or nature reserve park, according to its particular qualities and the needs of the public. Polar Bear is a primitive park.



Ontario

Ministry of
Natural
Resources

Hon. Frank S. Miller
Minister

Dr. J. K. Reynolds
Deputy Minister